Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1. (Currently amended) A method of treating osteoarthritis regenerating hyaline cartilage in a mammalian host, said method comprising:
- a) generating a recombinant viral or plasmid vector comprising a DNA sequence encoding transforming growth factor β1 or BMP-2 operatively linked to a promoter;
- b) transfecting *in vitro* a population of chondrocytes with said recombinant vector, resulting in a population of transfected chondrocytes; and
- c) transplanting said transfected chondrocytes without scaffolding by intraarticular injection to an osteoarthritic joint space of a mammalian host <u>afflicted with osteoarthritis</u>, such that expression of said DNA sequence within said joint space results in regenerating hyaline cartilage.
- 2. (Currently amended) The method of elaim 13 claim 1, wherein said recombinant viral vector is a retroviral vector.
- 3. (Currently amended) The method of <u>claim 13 claim 1</u>, wherein said recombinant vector is a plasmid vector.
- 4. (Currently amended) The method of elaim 13 claim 1, wherein said population of transfected chondrocytes are stored prior to transplantation.
- 5. (Previously presented) The method of claim 4, wherein said population of transfected chondrocytes are stored in 10% DMSO under liquid nitrogen prior to transplantation.

6.-22. (Canceled)